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**Motivation in Medicaid Programs  
for Promoting Preventive Care Compliance**

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**Motivation in Medicaid Programs  
for Promoting Preventive Care Compliance**

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**Thesis**

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## **Dedication**

This work is dedicated to my wife, Lydie Quebe.

## **Abstract**

### **Motivation in Medicaid Programs for Promoting Preventive Care Compliance**

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Traditionally, the compliance rates with preventive care services for members in the Medicaid Program are significantly lower than their peers enrolled in a commercial health insurance plan even when there are no financial costs for those services to Medicaid members. Start of life services which include prenatal care for pregnant mothers and well-child visits for newborns and infants are used to focus the research.

Non-compliance, defined as not receiving recommended preventive services within the timeframe expected, has large financial and societal costs. Women who receive only the minimal prenatal care are at high risk for developing pregnancy complications and having negative birth outcomes while those that failed to receive prenatal care were three times more likely to have a low-birth weight infant. Within the first 6 months of life, children with incomplete visits are 60 percent more likely to visit the emergency room. They may have untreated development delays and disabilities,

which occur in approximately 13 percent of children and are estimated to cost \$417,000 in direct medical costs and indirect lost productivity per child.

This thesis looks at motivational theories and economic incentives in practice in the health care industry to address the lack of compliance of services. It will analyze the problem from the perspective of how does a business, the State Medicaid Program or Medicaid Managed Care Organization (MCO), get a customer, the Medicaid population, to perform a specific behavior, receive preventive care services using motivational theories.

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## **Chapter 1: Introduction**

### **BACKGROUND AND HISTORY OF MEDICAID**

President Lyndon B. Johnson signed the Social Security Amendments of 1965, which added Title XIX to the Social Security Act and created the Medicaid program to provide health care benefits for people and families with low incomes, limited resources, and special needs. The Medicaid program is a State-administered, Federally-governed program funded by both levels determined by the Federal Medical Assistance Percentages (FMAP) formula (Department of Health & Human Services, 2010). The states can utilize a waiver authority to move membership to privatized Managed Care Organizations (MCO), generally traditional Health Maintenance Organizations (HMO) (Centers for Medicare & Medicaid Services).

### **PREGNANT WOMEN AND NEWBORNS IN MEDICAID AS A POPULATION**

One special population in Medicaid is the pregnant women and infants at or below the poverty line. This is now a required population for States that participate in the Medicaid program. The health coverage includes all pregnancy-relates services from prenatal, delivery, and post-partum services and well-child visits for children, also known as Early and Periodic Screening Diagnosis and Treatment (EPSDT) visits. Once eligibility is established for a pregnant woman, the coverage is effective until 60 days after the end of the pregnancy, and infants born to those mothers are covered as “newborns” until their first birthday (Pregnant Women).

## **MEDICAID COSTS OF THE POPULATION**

Pregnant women and newborns are protected from the general alternative premiums that might be required for other coverage and services under the Premiums and Cost Sharing rules (Centers for Medicare & Medicaid Services, 2008) and incur no cost for care associated with basic prenatal care and delivery and other pregnancy-related services to improve maternal and infant health outcomes (Ranji, M.S., Salganicoff, Ph.D., Stewart, J.D., Cox, M.A., M.P.H., & Doamekpor, 2009). Total Medicaid spending in FY2009 was 380.6 Billion with an average cost per enrollee of \$6,890 while non-disabled children received an estimated \$2,848 in benefits on average (Department of Health & Human Services, 2010). Of the 4.2 million deliveries in 2008, 94.1 percent had complications incurring a 50 percent increase in delivery costs over deliveries without complications with a total cost of \$17.4 billion in 2008, or nearly 5 percent of total hospital costs in the United States (Elixhauser, Phd & Wier, MPH, 2011).

## **COMPLIANCE WITH AND BENEFITS OF PREVENTIVE SERVICES**

Prenatal care refers to regular medical care recommend for women during pregnancy consisting of a visit once a month for weeks 4 through 28, twice a month for weeks 28 through 36, and weekly for week 36 to birth (U.S. Department of Health and Human Services). Women who receive only the minimal prenatal care are at high risk for developing pregnancy complications and having negative birth outcomes while those that failed to receive prenatal care were three times more likely to have a low-birth weight (National Committee for Quality Assurance (NCQA), 2011). In 2010, 91.0 percent of Commercial HMO pregnant women had 80 percent or more of expected prenatal visits

while only 83.7 percent of Medicaid pregnant women had 80 percent or more of expected prenatal visits (National Committee for Quality Assurance (NCQA), 2011).

After birth, infants receive well-child visits frequently within the first 15 months of life, with 6 or more visits expected, that provide a complete physical and developmental examination of the child along with vaccinations (Jennifer K. Mannheim, 2011). Within the first 6 months of life, children with incomplete visits are 60 percent more likely to visit the emergency room. They may have untreated development delays and disabilities, which occur in approximately 13 percent of children and are estimated to cost \$417,000 in direct medical costs and indirect lost productivity per child (National Committee for Quality Assurance (NCQA), 2011). In 2010, 76.3 percent of Commercial HMO children fewer than 15 months of age received 6 or more well-child visits while only 60.2 percent of Medicaid children, which has been trending upwards from 37.3 percent of Medicaid children in 2001 (National Committee for Quality Assurance (NCQA), 2011).

Non-compliance with preventive services is defined as not receiving the recommended health care services or number of visits for preventive care.

## THESIS AND STRUCTURE

***Given that preventive services are free of costs for pregnant mothers and children in Medicaid, why are the compliance rates for these services significantly lower for this population than for those covered under commercial insurance?***

This problem will be approached from multiple angles starting with identifying some of the root causes and problems. It will be analyzed from the perspective of how

does a business, the State Medicaid Program or Medicaid Managed Care Organization (MCO), get a customer, the Medicaid population, to perform a specific behavior, receive preventive care services using motivational theories. It will examine the motivations of all the stakeholders in the care chain: insurers, providers, and members.

It is an important question from a financially sustainable position of a state or Managed Care Organization because the hospital costs for an infant with a principal diagnosis of low birth weight or prematurity was \$75,000 compared to \$1,300 for infants without complications (O'Connor, Healthy Babies: Efforts to Improve Birth Outcomes and Reduce High Risk Births, 2004). Infant care in neonatal intensive care units (NIQUs) accounts for 75 percent of all newborn care costs and have an average cost of about \$3,000 per day (Kornhauser, MD & Schneiderman, MD, 2010). Out of the 21 reporting states, over 45 percent, on average, of all births were in the Medicaid program in 2009 (Marks, 2010 Maternal and Child Health Update, 2011).

It is an important question from an academic perspective of why people do not take advantage of a service that is in their best interest and has no cost, and how do you motivate them to receive the service. Most of the focus by insurers and State programs has been on economic incentives and penalties directed at the Managed Care Organizations and health care providers. Recently, there have been studies performed on how best to reward members to incentivize healthy behaviors (Greene, PhD, 2007).

This thesis will be presented in five chapters.

### Chapter 1: Introduction

Chapter 1 provides the background and history of the Medicaid Program, how it works, and identifies the specific subset of Medicaid population being researched. It continues to describe the phenomenon being researched and why it is important to us as a society.

### Chapter 2: Background on Health Care and Compliance

Chapter 2 introduces the constituents of a Medicaid program and reviews rate trends for relevant measures from the HEDIS standards for statistical analysis of compliance. It identifies through studies common barriers to receiving care for the Medicaid population.

### Chapter 3: Literature Review

Chapter 3 includes a review of available data sources related to motivation and economic incentive theories. Motivation has been studied since Sigmund Freud founded Psychoanalysis, and it has been further explored and refined since that time. There is a wealth of studies, many recent that discuss intrinsic and extrinsic motivation theories – some of which have been in health care.

#### Chapter 4: Analysis and Recommendations

Chapter 4 applies the motivational theories to the responsible parties in the health care delivery system. It will discuss current interventions and applications to improve care through extrinsic motivation.

#### Chapter 5: Conclusions.

This paper will interlace these approaches together to draw conclusions about how to improve motivation can influence the compliance with care.

## **Chapter 2: Background on Health Care and Compliance**

### **MEDICAID INSURANCE STRUCTURE**

In Medicaid, there are three parties involved in the care delivery system: the insurer, the health care provider, and the individual patients (members of the insurer). The insurer can be the State managed Medicaid Program (e.g. a fee-for-service program) or a Managed Care Organization. The provider can be an individual physician, a legally organized group of physicians, and a facility like a hospital. The member is a Medicaid eligible individual assigned to the insurer to provide health insurance. The insurer contracts with the providers to create a network of providers and services to support their membership.

When the Medicaid program is outsourced to private insurers, members have a choice of insurer during open enrollment period. Otherwise, the member is assigned to the State with no choice. This assignment decides the available providers based on the insurer's provider network. Private insurers are required by contract to maintain a specific number of providers of each type to prevent access to care.

### **MEDICAL STATISTICAL DATA**

Health care is a well-studied subject in the United States supported by claim data available from insurers. The National Committee for Quality Assurance (NCQA) provides technical specifications, the Healthcare Effectiveness Data and Information Set (HEDIS), used by more than 90 percent of America's health plans (National Committee for Quality Assurance) to measure compliance. It contains measures for preventive care for prenatal and postpartum visits for pregnant women and well-child visits for newborns.



Specifically, the related measures within the HEDIS specifications are: “Prenatal and Postpartum Care”, “Frequency of Ongoing Prenatal Care”, and “Well-Child Visits in the First 15 Months of Life”.

#### **COMPLIANCE RATES**

The NCQA HEDIS standard for reporting and the annual report is used for all the following tables for measuring compliance among the population in receiving the expected services. The following measures and definitions of the measures are taken directly from the annual report NCQA “The State of Health Care Quality 2011” report (National Committee for Quality Assurance (NCQA), 2011). The measures identified are strictly related to prenatal care and well-child visits. HEDIS consists of 76 measures across 5 domains of care.

All Medicaid rates are trending upwards, but all still remain significantly behind their commercial counterparts. Only about 60 percent of Medicaid mothers receive 80 percent or more of the recommend prenatal visits – there is not a commercial set of values to compare against. Only about 60 percent of Medicaid children ages 0-15 months received 6 or more EPSDT visits.

## **Prenatal and Postpartum Care**

This measure has two indicators related to deliveries of live births between November 6 of the year prior to the measurement year and November 5 of the measurement year. Timeliness of Prenatal Care: The percentage of deliveries that received a prenatal care visit in the first trimester or within 42 days of enrollment in the health plan.

<b>Year</b>	<b>Commercial HMO</b>	<b>Medicaid HMO</b>
<b>2010</b>	91.0	83.7
<b>2009</b>	93.1	83.4
<b>2008</b>	92.4	81.9
<b>2007</b>	91.9	81.5
<b>2006</b>	90.6	81.2
<b>2005</b>	91.8	79.6
<b>2004</b>	90.8	78.2
<b>2003</b>	89.4	76.5
<b>2002</b>	86.7	70.4
<b>2001</b>	85.1	72.9

Table 1: Timeliness of Prenatal Care

### Frequency of Ongoing Prenatal Care Measure

This utilization measure assesses the percentage of Medicaid deliveries between November 6 of the year prior to the measurement year and November 5 of the measure year that received the following number of expected prenatal visits: <21 percent of expected visits; 21 percent–40 percent of expected visits; 41 percent–60 percent of expected visits; 61 percent–80 percent of expected visits; [and] ≥81 percent of expected visits.

Year	Medicaid HMO
2010	61.1
2009	61.6
2008	58.7
2007	59.6
2006	58.6
2005	55.8
2004	51.5
2003	48.2
2002	41.0
2001	39.2

Table 2: Frequency of Prenatal Care Visits: 81% of Expected Visits

### Well-Child Visits in the First 15 Months of Life

The percentage of children who turned 15 months old during the measurement year and had the following number of well-child visits with a primary care physician during the first 15 months of life: No well-child visits; One well-child visit; Two well child visits; Three well-child visits; Four well-child visits; Five well-child visits; [and] Six or more well-child visits.

Year	Commercial HMO	Medicaid HMO
2010	76.3	60.2
2009	74.5	59.4
2008	75.2	58.8
2007	72.8	52.9
2006	72.9	55.6
2005	71.1	49.1
2004	68.7	47.4
2003	66.6	45.2
2002	64.4	43.0
2001	59.6	37.3

Table 3: Ages 0-15 Months: Six or More Well-Child Visits

## **MEASURES OF QUALITY**

The HEDIS measures capture numerically a quantified and measurable number regarding the quality of care based on expected services, but receiving a service is only loosely linked to the actual outcome of care. Other measures from the findings of the Pay for Performance Program Summary prepared for California HealthCare Foundation include (Bailit Health Purchasing, LLC, 2009):

- Access: measure of easy access to services.
- Process: measure of compliance with the standard of service (e.g. did the member receive the appropriate number of prenatal visits).
- Outcome: measure of the outcome of care.
- Structure: measure of capability and infrastructure (e.g. electronic medical records or e-prescribing).
- Efficiency: measure of operational efficiency.
- Quality Improvement Programs: measure of participating or starting a quality improvement program.

## **BARRIERS TO CARE**

Finding relevant and timely information about barriers to care for prenatal and well-child visits specific to the Medicaid population (excluding the uninsured) has been more challenging. State-specific studies will be used and limitations of application to other states will be recognized as stipulations. This is an area that could be further addressed through surveys delivered after maternal hospital admissions and captured during emergency room visits for infants.

In 2007, Texas was court-ordered to conduct an independent study to identify barriers to utilization of EPSDT services for children in the Medicaid managed care programs called the “Frew No Care Study” (Altarum Institute, 2010). The study used 3 methods to collect and analyze data regarding barriers to access and care: administrative (claim) data, surveys, and focus groups.

The Texas “Frew No Care Study” provided a detailed analysis of barriers to well-child care for the State of Texas. The authors felt that, “[t]he prevalence of No Care in Texas compares favorably to the prevalence of No Care derived from the nationally representative 2007 Medical Expenditure Panel Study.” (Altarum Institute, 2010) Altarum chose the 2007 as reasonably recent study as a reference point (Altarum Institute, 2010).

In order to provide a point of reference against which to compare the observed rate of No Care among Class Members, Altarum conducted an analysis of data from the 2007 Medical Expenditure Panel Study (MEPS). Funded by the Agency for Healthcare Research and Quality, MEPS is designed to provide data on healthcare use, medical expenditures, sources of payment, and insurance coverage for a representative sample of the noninstitutionalized U.S. population.

The study identified lack of physical access, communication barriers, and awareness of services as the most important barriers to well-child visits (Altarum Institute, 2010). In addition, the report noted a strong inverse relationship between length of enrollment in the Medicaid program and the likelihood of being in the No Care group in the study (Altarum Institute, 2010).

For prenatal visits, other studies found similarities with the Frew report on barriers. A study by the National Public Health and Hospital Institute found that barriers

to care included: lack of transportation and provider networks to ensure adequate access, language and cultural barriers, and knowledge regarding the importance of prenatal care (Regenstein, PhD, Cummings, PhD, & Huang, MS, 2005). These barriers align with the lack of physical access, communication, and awareness of service barriers identified in the Frew report.

### **Lack of Physical Access**

The Frew study identified transportation issues as one of the most frequently identified barriers even referencing a Texas Medicaid Transportation Program (MTP) which showed that over 1,000,000 Medicaid-enrolled do not have access to transportation services (Altarum Institute, 2010). This was identified as significant to rural areas but also relevant to urban areas without comprehensive public transportation networks.

Access to care issues included the inability to find providers willing to accept new Medicaid patients as part of their panels. Parents that had primary care providers often faced other barriers with provider office logistics, including: the ability to schedule appointments, inconvenient clinic hours, long waiting room lines, and doctors that appear unresponsive to their needs (Altarum Institute, 2010).

### **Communication Barriers**

The study referenced a Health Services Research report that found non-English speakers were in poorer health and had more difficulty in accessing care (Altarum Institute, 2010). Often interpreters or interpreter services were not available in physicians' offices or clinics, and family members acting as interpreters were found to

make “clinically significant errors” compared to professionally trained interpreters (Altarum Institute, 2010).

### **Awareness of Services**

*"Health Literacy: The degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions."* (U.S. Department of Health and Human Services, 2010)

Navigating the health care system can be confusing and difficult even for those that work in the industry itself. Given that outsiders to the industry, and more specifically the Medicaid population, generally have a lower level of health literacy, knowledge of benefits available and how to access them is a significant barrier to receiving appropriate and timely care (Altarum Institute, 2010). The study drew from a number of supporting reports of the impact of lower health literacy.

A Government Accountability Office (GAO) report (2001) indicated that parents of children eligible for EPSDT services are less likely than other parents to be aware of the necessity for preventive care or well-child visits. Riportella-Muller (1996) found that a number of parents do not think that care is necessary when a child is not sick, and some parents claim that their child received an EPSDT preventive care visit while a review of their Medicaid claims and encounters failed to substantiate such a preventive care visit. A recent evaluation of an outreach and education program in California indicated that increasing knowledge of the program was effective in increasing the rate of utilization of EPSDT services (Snowden et al., 2008).



## **Chapter 3: Literature Review**

Motivation has been studied since Sigmund Freud founded Psychoanalysis. This chapter will look at both extrinsic and intrinsic motivation theories that have been developed and studied since Freud. It will look at a traditional view of motivational theory and a contemporary view of motivational theory. It will provide a short comparison of the two different views to highlight the challenges in the traditional view.

### **MOTIVATIONAL AND ECONOMIC INCENTIVE THEORIES**

Motivation describes the psychological forces that determine what a person will do (direction), how hard they will try (effort), and how hard they will try in the face of obstacles (persistence). It is further refined into intrinsic motivation (internally driven) and extrinsic motivation (externally driven). Intrinsic motivation is the drive to do or accomplish something because of the enjoyment or sense of satisfaction that it brings. Extrinsic motivation is the drive to do or accomplish something because there is an external reward received from that action.

### **EXTRINSIC MOTIVATION**

While intrinsic is motivation from internal factors, extrinsic is motivation through external factors in the form of rewards or penalties. Often these rewards and penalties come through remunerative and financial economic incentives (e.g. pay and performance-related bonuses). To be successful, the reward must be something the person values (valence), feels that the behavior can be exhibited or task can be completed (instrumentality), and believes they themselves have the capability to accomplish what is

requested satisfactory to obtain the reward (expectancy). Victor Vroom first introduced this model of motivation as the Expectancy Theory in his 1964 book *Work and Motivation* (Vroom, 1964).

Newer research is discovering that financial incentives can have unintended negative consequences. Adam Grant and Jitendra Singh identified three risks with strong financial incentives in place in their paper “The Problem with Financial Incentives” (Grant & Singh, 2011). The first risk is that many recipients of the program will cross ethical boundaries to earn the reward – often choosing the easiest path versus the right path. Second, financial incentives can create pay inequity amongst peers, which can harm performance. Third, social psychological research has shown that extrinsic rewards can lead to reducing intrinsic motivation. “This is known as the overjustification effect: Our intrinsic interest in a task can be overshadowed by a strong incentive, which convinces us that we are working for the incentive.”

#### **A TRADITIONAL VIEW OF INTRINSIC MOTIVATION**

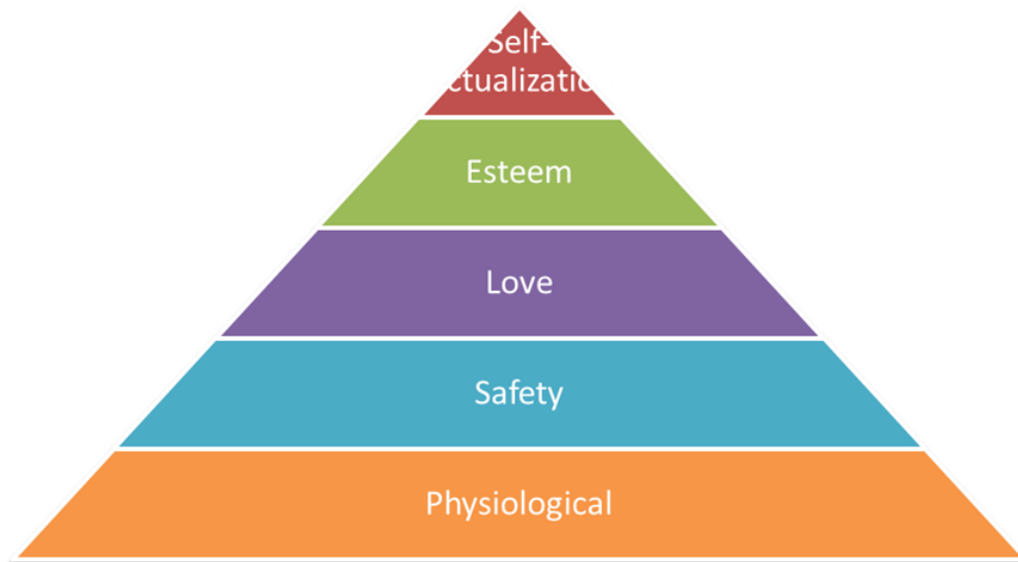
Abraham Maslow published his now well-known Maslow’s Hierarchy of Needs in a 1943 paper titled “A Theory of Human Motivation.” Maslow identified five basic needs in which people are motivated to satisfy in mostly a progressive order (Maslow, 1943):

- Physiological: the needs of the human organism, which include breathing, nutriment, procreation, and homeostasis;
- Safety: security of self, health, environment, and resources;
- Love: friendship, family, and sexual intimacy;

- Esteem: self-esteem and respect by and of others;
- Self-actualization: self-fulfillment in realizing one's potential.

The order of the needs is important in that the expectation is a person must satisfy the current need before focusing on a higher-level need – or at least that the most dominant need will monopolize the person's consciousness (Maslow, 1943). These needs focus your goal setting.

The hierarchy is commonly represented as a pyramid with each need as a layer of the pyramid representing the respective order of progression through the need hierarchy. In Maslow's model most – if not all – of a layer's needs must be met before moving to a higher-level need, and the pyramid structure represents this visually.



**Figure 1: Maslow's Hierarchy of Needs**

### **Challenges and Limitations of the Traditional View**

The hierarchy is presented as a fixed order progression model, but Maslow admitted that there were numerous exceptions. This limits what a person might focus on that the lower level are internal focused on the well-being of oneself without the influence of social relationships and families. It ignores cultures that might put the well-being of the whole above the individual as a motivation that direct one's actions that seem counter-intuitive to the self. In his publication, he discusses the influence of the parent's state onto the child, but he ignores the changing dynamic of the relationship and influence that the child has on the parent.

### **A CONTEMPORARY VIEW OF INTRINSIC MOTIVATION**

A more recent model was suggested by Dr. Steven Reiss, a retired tenured Professor of Psychology. In his book "Who Am I", Dr. Steven Reiss outlines "the 16

basic desires that motivate our actions and define our personalities” that provide a framework for creating motivation profiles with relative values for each of the core human needs (Reiss, Ph.D., 2002). Dr Reiss considered a basic desire the subjective experience of a need (Steven Reiss, 2010). He called it the Reiss Profile, and it identifies the fundamental values, goals, and motives of human personality. Dr. Reiss identified the following 16 desires (human needs):

- Acceptance, the need for approval
- Curiosity, the need for learning and education
- Eating, the need for food consumption
- Family, the need to raise children
- Honor, the need for traditional values of one’s group
- Idealism, the need for social justice
- Independence, the need for individuality
- Order, the need for organization
- Physical Activity, the need for exercise
- Power, the need for influence
- Romance, the need for sex
- Saving, the need for collecting
- Social Contact, the need for relationships
- Social Status, the need for social significance
- Tranquility, the need for safety
- Vengeance, the need to win

### **Strength of the Contemporary View**

To best motivate an individual with intrinsic motivation, it is important to understand their internal belief and value system, specifically in regard to the behavior you want them to exhibit. It's this diversity of individuals and cultures that causes Maslow's Hierarchy of Needs to fall short. The Reiss Profile enables non-sequential and non-hierarchy needs to be met per individual without dependencies on each other, which allows focusing effort and energy on specific needs to get a desired behavior without satisfying all the needs in a chain. Most importantly, the model allows the needs of another person (i.e. a child) to outweigh the needs of an individual. This is important because the direct receiver of benefits of the care is the child, whether in utero or as an individual, and not the mother or responsible party that needs to be directly motivated to seek the preventive services.

## **Chapter 4: Analysis & Recommendations**

The intent of this paper is to apply motivational and economic incentive theories to the Medicaid population to address their barriers of care. Specifically, it will examine how extrinsic and intrinsic motivators affect behaviors to improve the quality of care. This chapter addresses the application of motivation to the primary parties in the medical delivery system: insurers, providers, and members.

### **INSURER MOTIVATION AND INCENTIVES**

State Medicaid programs have the option to move the members into managed care organizations rather than have the State manage the population through a fee-for-service program, a program that reimburses individual providers for each service performed. The State can move the members into a risk-based managed care organization (MCO) or into a Primary Care Case Management (PCCM) program, the latter is a blend of fee-for-service and conventional managed care. The two programs are similar in that they both utilize a capitation payment schedule – a fixed monthly fee – to provide care for the member (Kaiser Commission, 2010). In 2008, 33.4 million members, or 71% of all members, were enrolled into a managed care program (Kaiser Commission, 2010).

States contract out their fee-for-service and PCCM programs to the private sector. Their available funds come from the State budget with Federal matching dollars. While the Balanced Budget Act (BBA) of 1997 maintained the requirement for quality review of Medicaid MCOs, the State has no comparable standards or monitoring procedures required for the fee-for-service or PCCM programs (Kaiser Commission, 2010). The

vendors managing those programs as third-party administrators are motivated by operational excellence to increase profits from the contracted rate of the agreement and not by quality of care outcomes. In Texas, it took a lawsuit, *Frew v. Hawkins* originally filed in 1993, and subsequent corrective action orders, filed as late as 2007, to finally impact the culture around quality of care for well-child visits (Texas Health and Human Services Commission).

The greatest challenge facing State Medicaid programs are the growing eligible population, the increasing medical costs, and the shrinking State budgets. To receive matching funds from the Federal government, States must implement a minimum set of benefits and coverage for its members. This compression of available funds to cover the minimum required benefits does not provide a lot of room to focus on quality of care issues, which are not federally mandated.

The best use of financial incentives as an extrinsic motivator for State Medicaid programs is to use the federal matching funds. States could receive higher matching amounts based on their quality of care outcomes and compliance rates similar to how States are mandated to hold MCOs accountable. States could compete by fiscal year in a relative ranking formula for additional funds. This approach could have negative consequences if it was used to penalize States below the current levels, and it does not address the problem of States at the bottom never having the appropriate resources to implement better programs. It would need to be designed to carefully prevent States from remaining at the bottom without appropriate resources while encouraging them to re-enforce their Medicaid programs in hopes of receiving more funding.



Managed care organizations are private health care insurers that operate either as a non-profit or for profit entity within the same State. Non-profit organizations still strive to make an operational profit, but that additional money is not distributed to the shareholders as dividends. These MCOs assume some or all risk for services for a monthly payment per member, a capitation rate. In 2008, 56 percent of participating insurers were Medicaid line of business primary, meaning that 75 percent or more of their business was through the Medicaid membership (Kaiser Commission, 2010). The other 44 percent were primarily commercial plans with Medicaid as a secondary line of business.

The financial incentive to assume the risk for the members is the small available window of profit between the administrative overhead of running operations and the medical loss ratio (MLR) – the amount of money spent on medical expenses. Eleven states have set a minimum level for the MLR to ensure that health plans spend at least that percentage on medical costs with Virginia and Hawaii at the top at 92 percent and 91.5 percent, respectively (The Kaiser Family Foundation, 2010).

The following table discusses the findings from a report published by The Commonwealth Fund about Medicaid managed care plans' costs and quality of care provided to the patients. It looks at Medicaid-only (primary line of business plans) and multi-product plans across both public and private companies. The final two columns in the table compare a special class of health plan, provider-sponsored, which “include plans that are owned, affiliated, or governed by health care systems, community health centers and clinics, or physician practices.” (McCue & Bailit, 2011)

Operating Cash Flow (OCF) uses the Per Member Per Month (PMPM) measurement as a way to normalize data sets across different health plans by creating a ratio for the data across one member enrolled for one month consecutively. This ratio allows for comparing data between plans even when membership sizes differ. It represents the amount of cash a company generates from the revenues it collect, in case revenues represents the capitation payments from the Medicaid sponsor (State Medicaid Program), excluding costs associated with long-term investments.

Performance and Measures	Medicaid, Public Company	Medicaid, Private Company	Multi- product, Public Company	Multi- product, Private Company	Provider Sponsored Company	Not Provider Sponsored
<b>Financial Performance</b>						
Medical Loss Ratio	84%	90%	88%	90%	89%	71%
Administrative Cost Ratio	14%	10%	12%	10%	8%	12%
Operating Cash Flow (PMPM)	\$4.55	\$4.11	\$5.40	\$4.11	\$3.04	\$5.26
<b>Clinical Quality Measures</b>						
Preventive Care Composite	59%	70%	62%	70%	71%	63%
Chronic Illness Care Composite	50%	63%	52%	63%	64%	56%
<b>Consumer Experience</b>						
Overall Rating of Plan	66%	73%	72%	73%	77%	71%
Getting Care Composite	75%	79%	76%	79%	79%	77%
Customer Service Composite	80%	83%	81%	83%	82%	81%

Table 4: Assessment of Medicaid-Focused Health Plans from 2009 and 2012 (McCue & Bailit, 2011)

Private Medicaid companies spend more money on patient care (MLR) and have lower administrative costs versus their public counterparts. In addition, their composite scores for both the quality measures and consumer experience are higher than the public companies. Provider-sponsored organizations had significantly lower administrative costs, higher expenditures on medical care, and better quality of care and customer service than the non-provider sponsored organizations.

Intrinsic motivation for insurers is driven from the core mission of that company and how they relate to corporate social responsibility – how the activities of the organization affect the community and the consumers as stakeholders. Those health plans with more roots to the local community, the provider-sponsored health plans, had better quality of care and customer service results, and spent 97% of their premiums.

Pay for Performance (P4P) is being tried as an extrinsic motivator for Medicaid MCOs. Pennsylvania has established a pay for performance program from 2005 and have distributed approximately \$9 million just in the first two years of the program (Pennsylvania Department of Public Welfare, 2007). They realized improvements in six of the twelve HEDIS measures related to quality of care and access to care.

Pay for Performance programs allocate funds at a high-level with the insurer and expect that insurer to address needs and provide services to support better health outcomes. They do not specify the implementation rules or how an MCO might address some of the common barriers in that they do not specifically incentivize the MCO to maintain rural provider networks and improve transportation services. The funds may not trickle down the actual care giver (provider) or member and so might not address motivational drivers for those participants, but insurers have larger financial resources to

be able to develop programs to help manage care and act as natural data aggregators of their provider network.

### **Recommendation**

Since the insurer is less connected with the member and provider relationship, extrinsic rewards for improvement might be better allocated at that level of relationship. To address shortcomings in the reimbursement rates with providers, and the impact to provider participating in the program and provider network, States could use additional payments to support raising rates associated with preventive services that they want to target.

Like other businesses, health plans are driven by the needs of their shareholders and can define their operating model as one (or more) of the “Value Disciplines” to create customer value and provide a competitive advantage (Treacy & Wiersema, 1993). The Value Disciplines are: Product Leadership, Operational Excellence, and Customer Intimacy. Product Leadership strives to product market leading products. Medicaid health plans are limited to disciplines as the benefits and coverage is mandated by law and the premiums and capitations for those benefits are considerably less. A health plan would need to be intrinsically motivated to spend money and expand the benefits and programs offered to membership or faced with sanctions for failing to meet the minimum quality of care.

This forces these insurers and providers into Operational Excellence to focus on minimizing administrative costs and controlling medical costs for maximizing the return. Quality should not be about how many people you rendered services to but how well

those services were rendered. Customer Intimacy focuses on excelling in customer service and relationships. The insurers that were provider sponsored, and intrinsically motivated by their core mission, exhibited a greater relationship with their community that resulted in higher compliance rates and plan satisfaction.

The Medicaid program needs to encourage States to utilize private community-owned or provider sponsored health insurers. Their core values and integral connection with their community makes a built-in intrinsic motivator for the organization. These private companies scored better overall in financial performance, clinical quality measures, and consumer experience.

#### **PROVIDER MOTIVATION AND INCENTIVES**

Access to providers are one of the most consistently named barriers to care for the Medicaid population, and 16.3 percent of Medicaid members had at least 1 barrier to timely primary care, which is twice the amount of private insurance (Cheung, Wiler, Lowe, & Ginde, 2012). For access to care, especially in rural areas, low provider participation in Medicaid program limits availability. Even for those providers that do participate, their panels – the membership they have responsibility for primary care – are mixed between private insurance and Medicaid, which creates an artificial competition for resources based on provider reimbursements.

Colorado found in 2007 that the Medicaid fee schedule had an EPSDT visit for under 1 years of age to pay out \$55.05 to the provider while the average commercial rate was \$124.00 (Colorado Department of Health Care Policy and Financing, 2007). When surveyed, 90.8 percent of providers in South Dakota stated that “Medicaid does not pay

enough to cover their overhead costs,” which means the provider cost shift those additional costs to their private insurances (South Dakota State Medical Association, 2009). The survey also found that 30.3 percent of the same providers have stopped accepting new Medicaid patients and 2.5 percent have stopped accepting all Medicaid patients due to reimbursement levels. While reimbursement rates have increased 15.1 percent on average, this increased rate was below the general rate of inflation for the same time period of 2003-2008 and resulted in a reduction in real payments (Zuckerman, Stockley, & Williams, 2009). In general, Medicaid pays 20-25 percent less than private insurance (Smith, 2009).

In addition to the reimbursement rate difference between Medicaid and private insurance, providers cannot charge Medicaid recipients money for not showing up to an appointment, which is an option for private insurance. This is a lost opportunity for revenue and can have an overbooking affect for providers, which is one of the complaints in barriers to care – long wait room times. On a side note, there was a research paper that evaluated the best method to optimize overbooking similar to how airlines perform to decrease no-show problems from their initial finding “that patient no-show rates always increase after overbooking.” (Zeng, Zhao, & Lawley)

Administratively, turnaround times on claims processing and receiving the actual reimbursement – the time after the provider has spent resources to deliver a service and when an insurer reimburses for that expenditure – has a direct effect on provider participating that raising reimbursement rates might not be able to offset. Commercial reimbursement times are faster than Medicaid times in every state (Cunningham &

O'Malley, 2008). This highlights another disparity between Medicaid programs and private insurance that discourages providers from participating.

The disparity between the rates, processes and procedures and how providers react can be evaluated by using the equity theory, first developed by John Stacey Adams in 1963 (Adam's Equity Theory). Equity theory seeks to explain relational satisfaction and perceived fairness between the inputs a worker provides (health care providers delivering services) and the outputs they receive (reimbursement for services rendered). Given an imbalance between the inputs and outputs, inputs will be adjusted to have a perceived balance with outputs. Applying this to providers that have fixed outputs – the reimbursement rate is fixed – providers will seek a balance by lowering their inputs. This is further amplified by social comparison when the output of the Medicaid reimbursement rates are compared with the reimbursement rates from private insurance. Reimbursement turnaround is a controllable output for insurers. While a simple model overall, equity theory applies well in this case where the outputs are fixed and the evaluation is to the reaction and how to balance the inputs.

While revenues compose the base economic incentives for providers, insurers are implementing pay for performance programs that supplement the standard fee schedules with additional money for performing specific services or improving quality of care rates. Pay for performance is an incentive program, for health care providers, which rewards providers for meeting targets for quality of care goals. The rewards include financial payment models and non-financial models (LLanos, MBA, Rothstein, MPP, MPH, Dyer, & Bailit, 2007). Studies measuring the impact of pay for performance programs are just emerging for both managed care organizations (MCOs) and health care providers, and



results related to prenatal and well-child care specifically will be extrapolated from studies and research regarding general preventive care and applied to the barriers to care identified.

In 2006, 28 states had existing programs and 34 states were implementing new programs with a projection of 85 percent of states having a pay for performance program by 2011 (Kuhmerker, 2007). These pay for performance programs are financial incentives using extrinsic motivation to encourage the provider organizations improve quality of care, but they focus on the provider organization and not the direct care giver physician. A few non-financial incentives were identified and recommended, but these were more indirect financial incentives because they led to better brand recognition (e.g. a distinguished provider rating), lower administration costs (e.g. technical assistance and reduced administrative requirements), and market share (e.g. auto-assignment preferences) that would raise revenue or profits (LLanos, MBA, Rothstein, MPP, MPH, Dyer, & Bailit, 2007).

As an extrinsic motivator, pay for performance programs are at risk for abuse (e.g. “gaming”), lowering performance, and diminishing intrinsic motivation. These programs are focused on provider organizations and require the organization to trickle down policy and cultural changes to implement an effective quality improvement program. They measure meeting a number, usually a HEDIS measurement criteria, that tries to quantify quality of care but does not actually consider the satisfaction and outcome of the care other than the service was received. These programs could have unintended effects on true care and an organization’s culture. They could encourage providers to focus on just the few quality measures and ignore other important aspects of care (RAND

Corporation). Community-owned health clinics with strong ties to the community and mission to serve their community would be at risk for lowered intrinsic motivation because of the financial incentives that could redefine their culture.

Recent evaluations of pay for performance programs is lacking, but some studies are starting to show mixed results and question if these programs can improve patient outcomes and cut costs (RAND Corporation).

### **Recommendation**

The type of provider organization and size of the organization might decide the approach to incentives and motivation. A larger organization might do better with an extrinsic economic motivator that it can internalize and distribute according to its overall policies. Also, a larger organization can better manage the service reimbursement rate disparately between commercial and Medicaid patients by having more commercial patients to spread the additional costs of the Medicaid ones.

A smaller group or private physician is more sensitive to panel size (the number of members assigned to them or patients that are customers) and composition, Medicaid versus commercial. They may see participating in the program as their charity because of the missed opportunity for a higher margin in reimbursement rates when a Medicaid patient replaces a commercial one.

For both large and small, the reimbursement rate issue becomes a negative extrinsic motivator for providers because of the disparity. Adding a pay for performance program only works if it can close the gap between the rates, and it is easily achievable

and quickly given. This makes it more of a supplemental compensation rather than an incremental reward for achieving specific outcomes.

The advantage of the insurer is that they have more resources available than a provider to perform outreach to the members, but the disadvantage is they often have less of a relationship with the member than the provider. This relationship and the provider's ties with their local community can be reinforced to provide better care, and it grants an opportunity for using intrinsic motivators with the provider. States need to close the rate gap to give more resources to the providers to support the provider and member relationship. This is highly visible between the compliance rates between the commercial members and the Medicaid members, and as it impacts provider participation in the program, it becomes one of the first major barriers to care.

With provider participating being a large barrier to access to care, the States should seek to close the rate reimbursement gap between the Medicaid Program and commercial programs to remove the negative extrinsic incentive for providers. Both the State and health plans need to find better ways to support with resources and utilize the provider-patient relationship.

## **MEMBER MOTIVATION AND INCENTIVES**

Florida and Idaho used extrinsic motivation to reward Medicaid members for healthy behaviors as early as 2006 and 2007, respectively (Center for Health Care Strategies, Inc., 2007). The rewards were credits for other services, like over-the-counter medications. They found that even with the program, a lot of members did not know about the incentive program, or they were unsure how to spend the credits they did earn

often confusing them with a bill for services (Alker & Hoadley, 2008). As of 2011, Idaho still did not have data to show whether the incentives had an impact on behavior or proved to be cost-effective, and Florida had logistic issues with their program implementation and have not recognized if the incentives have had an impact on their Medicaid population (Miles, 2011).

Research to date on the effectiveness of incentivizing healthy behaviors has been very limited. Since the programs are modeled after the private sectors, the demographics of the recipients differ, and the programs need to be adjusted to meet those differences and their unique barriers to care. For example, transportation was noted as one the top barriers to care. Incentivize receiving a preventive service may not adequately address how the member actually gets to the physician's office.

Another emerging incentive program is pay for prevention, or client incentives, in which the recipient is the member themselves. The program is designed to incentivize healthy behaviors like receiving well-child visits (Greene, PhD, 2007). Research and studies on extrinsic incentives to members are limited.

Using the contemporary model of intrinsic motivation, motivators can be identified to reinforce the family relationships in members. Direct and indirect needs may have a positive or negative impact to motivation and the individual's relationship to family. For example, honor as a need might have a negative impact from culture and how one's culture perceives the importance of care or the source of a chronic disease. To improve the quality of care, nutrition and diet concerns must be culturally sensitive (need for honor) while considering how the diet impacts the fetus and infant (quality of care) (Central Virginia Health Planning Agency, Inc., 2010). Needs can be used as leverage to

force behaviors, such as making receiving care “achievements” that drive social status. This would be similar to how the social networking video game industry uses behavioral psychology to reinforce addictive behaviors through achievements and sharing. Although, not always with successful results (Antin & Churchill, 2011).

### **Recommendation**

At this level of participation, individuals are making decisions on the value of preventive care and how hard they will try to overcome any barriers to care. Using intrinsic motivators provides the best reinforcement for behaviors because it can avoid the negative impacts of financial incentives. In the case of mothers and preventive care services, it is the safety and care of their child (unborn or infant) which is an indirect need for the mother. Even for those parents motivated to provide preventive services to their children, they still must overcome the barriers to care that include access to care and transportation, communication barriers, and simply awareness of services and education.

The strength of the motivation is directly in conflict with the challenge of overcoming the barrier, and while challenge of the barrier can be reduce, they may not always be removed. States have the opportunity during eligibility verification and the enrollment into the program process to learn more about the member’s individual needs to improve the effectiveness of outreach programs. States should gather more information to tailor outreach programs, safety and support programs to people – recognizing them as individuals. This can be done with surveys and screenings during the enrollment process to capture information about that individuals barriers to care and value system. For

example, the State could create a Reiss Profile on each member that would then be provided to the insurer along with the member's individually identified barriers.

## **Chapter 5: Conclusions**

The health care delivery system is a complicated system to navigate with all the players, insurers, provider, and consumers, moving their own direction with their own motives. A significant amount of financial resources are allocate to Medicaid programs to provide health care to pregnant mothers and children of low income families. Yet, their compliance with preventive services is much lower than their private insurance counterparts. Medicaid members experience barriers to care that private insurance members do not at the same levels.

But the focus has not been on encourage or reinforcing intrinsic motivation, it has been on financial incentives to reinforce extrinsic motivation through pay for performance programs for insurers and providers with slower adoption with member pay for performance programs. Pay for performance programs have the following risks:

- Risk of “gaming” the system that introduces unethical – and potentially illegal – behavior. This could be represented as adverse selection for accepting new patients in which patients with high risk factors of non-compliance are excluded from the provider practice, or more simply just misrepresentation of the data and calculations (e.g. filing false claims for services).
- They can create pay inequity amongst peers that can harm overall performance. The money might go consistently to a top performing provider that has a more healthy population instead of supporting the provider that requires additional resources to bring patients into

compliance. This could be exhibited through the social comparison and the equity theory.

- Offering extrinsic rewards to members to be compliance with preventive care might actually crowd-out the intrinsic motivation.

Focusing on extrinsic motivators and financial rewards in health care to improve quality of care and increase compliance with preventive services has not proved to be overwhelming successful to date. Incentive programs might work better if they focus on how to strength intrinsic motivation for organizations to have community ties. For individuals, intrinsic motivation would have a more lasting effect on the members and be more effective overall if you could identify a way to apply it to a large scale.

In conclusion, States should recognize the value of organizations with communities and how that affects the organization's values and intrinsic motivation. They should seek to further encourage the formation and support of these types of organizations with legislation. With provider participating being a large barrier to access to care, the States should seek to close the rate reimbursement gap between the Medicaid Program and commercial programs to remove the negative extrinsic incentive for providers. Finally, States should take advantage of the opportunity during the enrollment process into the Medicaid Program for members to perform an intrinsic motivational profile along with social and economic indicators. They should focus funds on removing the barriers to care and encouraging members to receive preventive services not through economic incentives alone but more through intrinsic motivators.



## Bibliography

- Adam's Equity Theory*. (n.d.). Retrieved 7 1, 2012, from MindTools:  
[http://www.mindtools.com/pages/article/newLDR\\_96.htm](http://www.mindtools.com/pages/article/newLDR_96.htm)
- Alker, J., & Hoadley, J. (2008). *The Enhanced Benefits Rewards Program: Is it changing the way Medicaid beneficiaries approach their health?* Washington, DC: Health Policy Institute of Georgetown University.
- Altarum Institute. (2010). *Few No Care Study*. Texas Health and Human Services Commission.
- Antin, J., & Churchill, E. F. (2011). *Badges in Social Media: A Social Psychological Perspective*. Vancouver, BC, Canada: Yahoo! Research.
- Bailit Health Purchasing, LLC. (2009). *Pay-for-Performance in the Medi-Cal Managed Care and Health Families Programs*. California HealthCare Foundation.
- Center for Health Care Strategies, Inc. (2007). *Encouraging Healthy Behaviors in Medicaid: Early Lessons from Florida and Idaho*. Center for Health Care Strategies, Inc.
- Centers for Medicare & Medicaid Services. (2008). *Medicaid Program; Premiums and Cost Sharing*. Federal Register.
- Centers for Medicare & Medicaid Services. (n.d.). *Managed Care*. Retrieved 7 1, 2011, from Medicaid.gov: <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Delivery-Systems/Managed-Care/Managed-Care.html>
- Central Virginia Health Planning Agency, Inc. (2010). *Maternal & Child Qualitative Health Needs Assessment*. Virginia Department of Health's Office of Family Health Services.

- Cheung, P. T., Wiler, J. L., Lowe, R. A., & Ginde, A. A. (2012). *National Study of Barriers to Timely Primary Care and Emergency Department Utilization Among Medicaid Beneficiaries*. American College of Emergency Physicians.
- Colorado Department of Health Care Policy and Financing. (2007). *Compare: Reimbursement for Medicaid Versus Commercial Health Insurance Versus Office Expenses*. Colorado Department of Health Care Policy and Financing.
- Cunningham, P. J., & O'Malley, A. S. (2008). Do Reimbursement Delays Discourage Medicaid Participation By Physicians? *Health Affairs*, w17-w28.
- Department of Health & Human Services. (2010). *Federal Financial Participation in State Assistance Expenditures*. Federal Register.
- Department of Health & Human Services. (2010). *2010 Actuarial Report on the Financial Outlook for Medicaid*.
- Elixhauser, Phd, A., & Wier, MPH, L. M. (2011). *Complicating Conditions of Pregnancy and Childbirth, 2008: Statistical Brief*. Agency for Healthcare Research and Quality (AHRQ).
- Grant, A., & Singh, J. (2011). *The Problem with Financial Incentives -- and What to Do About It*. Knowledge@Wharton.
- Greene, PhD, J. (2007). *Medicaid Efforts to Incentivize Healthy Behaviors*. Center for Health Care Strategies, Inc.
- Jennifer K. Mannheim, A. (2011, 1 17). *Well-child Visits*. Retrieved 7 1, 2012, from MedlinePlus (U.S. National Library of Medicine): <http://www.nlm.nih.gov/medlineplus/ency/article/001928.htm>

- Kaiser Commission. (2010). *Medicaid and Managed Care: Key Data, Trends, and Issues*. The Henry J. Kaiser Family Foundation.
- Kornhauser, MD, M., & Schneiderman, MD, R. (2010, 1). *How Plans Can Improve Outcomes And Cut Costs for Preterm Infant Care*. Retrieved 7 1, 2012, from Managed Care: <http://www.managedcaremag.com/archives/1001/1001.preterm.html>
- Kuhmerker, K. (2007). *PAY-FOR-PERFORMANCE IN STATE MEDICAID PROGRAMS*. The Commonwealth Fund.
- LLanos, MBA, K., Rothstein, MPP, MPH, J., Dyer, M. B., & Bailit, M. (2007). *Physician Pay-for-Performance in Medicaid: A Guide for States*. Center for Health Care Strategies.
- Marks, C. (2011). *2010 Maternal and Child Health Update*. National Governors Association: Center for Best Practices.
- Marks, C. (2011). *2010 Maternal and Child Health Update*. NGA Center for Best Practices.
- McCue, M. J., & Bailit, M. H. (2011). *Assessing the Financial Health of Medicaid Managed Care Plans and the Quality of Patient Care They Provide*. The Commonwealth Fund.
- Miles, A. (2011, 4 11). *Medicaid To Offer Rewards For Healthy Behavior*. Retrieved 7 1, 2012, from Kaiser Health News: <http://www.kaiserhealthnews.org/stories/2011/april/08/medicaid-incentives.aspx>
- National Committee for Quality Assurance (NCQA). (2011). *The State of Health Care Quality 2011*. National Committee for Quality Assurance.

- National Committee for Quality Assurance. (n.d.). *HEDIS & Quality Management*. Retrieved 07 01, 2011, from NCQA: <http://www.ncqa.org/tabid/59/Default.aspx>
- O'Connor, J. (2004). *Healthy Babies: Efforts to Improve Birth Outcomes and Reduce High Risk Births*. National Governors Association: Center for Best Practices.
- O'Connor, J. (2004). *Healthy Babies: Efforts to Improve Birth Outcomes and Reduce High Risk Births*. NGA Center for Best Practices.
- Pennsylvania Department of Public Welfare. (2007). *Advances and Innovations: Pay for Performance (P4P)*. Retrieved 7 1, 2012, from Pennsylvania Department of Public Welfare: [http://www.dpw.state.pa.us/ucmprd/groups/webcontent/documents/document/p\\_003027.pdf](http://www.dpw.state.pa.us/ucmprd/groups/webcontent/documents/document/p_003027.pdf)
- Pregnant Women*. (n.d.). Retrieved July 1, 2012, from Medicaid.gov: <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Population/Pregnant-Women/Pregnant-Women.html>
- RAND Corporation. (n.d.). *Analysis of Physician Pay for Performance*. Retrieved 7 1, 2012, from RAND Corporation: [http://www.rand.org/pubs/technical\\_reports/TR562z13/analysis-of-physician-pay-for-performance.html](http://www.rand.org/pubs/technical_reports/TR562z13/analysis-of-physician-pay-for-performance.html)
- Ranji, M.S., U., Salganicoff, Ph.D., A., Stewart, J.D., A. M., Cox, M.A., M.P.H., M., & Doamekpor, L. (2009). *State Medicaid Coverage of Perinatal Services: Summary of State Survey Findings November 2009*. The Henry J. Kaiser Family Foundation.

- Regenstein, PhD, M., Cummings, PhD, L., & Huang, MS, J. (2005). *Barriers to Prenatal Care: Findings from a Survey of Low-Income and Uninsured Women Who Deliver at Safety Net Hospitals*. Washington, DC: National Public Health and Hospital Institute.
- Reiss, Ph.D., S. (2002). *Who am I?* Berkley Trade .
- Smith, D. G. (2009). *The Baucus Medicaid Provisions: The Senate's Massive Welfare Expansion*. Washington, DC: The Heritage Foundation.
- South Dakota State Medical Association. (2009). *Medicaid Rates and Provider Participation: Considerations for South Dakota Policymakers*. South Dakota State Medical Association.
- Texas Health and Human Services Commission. (n.d.). *Frew Strategic Initiatives*. Retrieved 07 01, 2012, from Texas Health and Human Services Commission: [http://www.hhsc.state.tx.us/about\\_hhsc/AdvisoryCommittees/Strategic-Initiatives.shtml](http://www.hhsc.state.tx.us/about_hhsc/AdvisoryCommittees/Strategic-Initiatives.shtml)
- The Kaiser Family Foundation. (2010). *Medicaid MCOs and Medical Loss Ratio (MLR) Requirements*. Retrieved 7 1, 2012, from The Kaiser Family Foundation: [http://www.kff.org/medicaid/quicktake\\_medicaid\\_mlr.cfm](http://www.kff.org/medicaid/quicktake_medicaid_mlr.cfm)
- Treacy, M., & Wiersema, F. (1993). Customer Intimacy and Other Value Disciplines. *Harvard Business Review*, 83-93.
- U.S. Department of Health and Human Services. (2010). *Healthy People 2010*. U.S. Department of Health and Human Services .
- U.S. Department of Health and Human Services. (n.d.). *Prenatal Care Fact Sheet*. Retrieved 07 01, 2012, from [womenshealth.gov](http://womenshealth.gov):

<http://www.womenshealth.gov/publications/our-publications/fact-sheet/prenatal-care.cfm>

Vroom, V. H. (1964). *Work and Motivation*. New York: Wiley.

Zeng, B., Zhao, H., & Lawley, M. (n.d.). *Primary-Care Clinic Overbooking and Its Impact on Patient No-shows*. Purdue University Krannert School of Management.

Zuckerman, S., Stockley, K. E., & Williams, A. F. (2009, April). Trends In Medicaid Physician Fees, 2003-2008. *Health Affairs*, pp. w510-w519.